

ABSTRACT OF THE DISCLOSURE

A minute object manipulating apparatus includes a tool which manipulates a manipulation target object, an observation unit capable of changing the magnification
5 for observing the manipulation target object and tool, a display unit which displays magnified images of the manipulation target object and tool, which are observed by the observation unit, a command input unit to cause the operator to input the manipulation command
10 signal of the tool, and a gain arithmetic unit which decides the manipulation gain of the tool on the basis of the magnification of the observation unit and magnified image information or pixel information on the display unit. The tool is driven and controlled on the
15 basis of the manipulation gain and manipulation command signal.